CRUISE REPORT¹

VESSEL: Townsend Cromwell, Cruise 99-08 (TC-246)

CRUISE

PERIOD: 15 July-2 August 1999

AREA OF

OPERATION: Northwestern Hawaiian Islands (NWHI) (Fig. 1)

TYPE OF

OPERATION: Support field camps and transport personnel of the Protected Species Investigation (PSI) Marine Mammal Research Program (MMRP), the U.S. Fish and Wildlife Service (USFWS), and the Department of Land and Natural Resources (DLNR).

ITINERARY:

15 July	_	Embarked Bud Antonelis, Matthew Berry, Ray
		Boland, Brenden Courtot, Leslie Lamkin, David
		Liittschwager, Bart McDermott, Susan Middleton,
		Cindy Rehkemper, and Mike Stork. Departed
		Honolulu 1430.

- 16 July Conducted one 500-m CTD cast.
- 17 July Arrived French Frigate Shoals (FFS) 1530. Off-loaded supplies and five drums of gasoline.

 Disembarked Antonelis. Departed FFS 1830.
- 18 July Conducted two 500-m CTD casts.
- 19 July Arrived Laysan Island 0700. Disembarked Berry, Courtot, Liittschwager, McDermott, Middleton, and Rehkemper. Departed Laysan Island 1200.
- 20 July Arrived Pearl and Hermes Reef (PHR) 1400. Onloaded equipment and supplies and disbanded the PSI field camp. Embarked Andrew McClung, Michelle Wainstein, Kate Willis, and Chad Yoshinaga.

¹This is a combined Cruise and Narrative Report.

- 21 July Recovered derelict nets at North Island, PHR. Departed PHR 1800.
- 22 July Arrived Kure Atoll 0900. On-loaded equipment and supplies and disbanded MMRP/DLNR field camp. Deployed and retrieved a field party to retag seals. Commenced debris cleanup of the F/V Paradise Queen II (PQII) shipwreck. Embarked David Gummeson, Irene Kinan, and Samantha Whitcraft.
- 23 July Completed F/V *PQII* shipwreck cleanup and conducted reef debris surveys of east side of atoll. Departed Kure 1730.
- 24 July Conducted one 500-m CTD cast. Arrived Midway Atoll 0730. Off-loaded 3 drums of gasoline, 209 lobster traps, and 3 storage bins. Disembarked Boland, Gummeson, Kinan, Lamkin, McClung, Stork, Wainstein, Whitcraft, Willis, and Yoshinaga.
- 25 July Departed Midway Atoll 0900.
- 26 July Arrived Lisianski Island 1130. On-loaded equipment and supplies and disbanded the MMRP field camp. Embarked Dorothy Dick, Lara Gibson, and Amber Pairis. Departed Lisianski Island 1830. Conducted one 500-m CTD cast.
- 27 July Arrived Laysan Island 0900. On-loaded equipment and supplies and disbanded MMRP field camp and retrieved marine debris from a shoreline collection point. Embarked Brenda Becker, Petra Bertilsson-Friedman, Sheila Gummeson, Liittschwager, Middleton, Rehkemper, Alex Wegmann, and Rebecca Woodward. Departed Laysan Island 1640.
- 29 July Arrived FFS 0910. Off-loaded propane and supplies and on-loaded marine debris. Embarked Antonelis and Tim Clark. Departed FFS 1800. Conducted one 500-m CTD cast.
- 30 July Arrived Necker Island 0810. Deployed and retrieved shore and boat party to census seals and survey the island. Departed Necker Island 1530. Conducted one 500-m CTD cast.
- 31 July Arrived Nihoa Island 1245. Deployed and retrieved shore and boat party to census seals and survey the island. Collected marine debris from the water. Departed Nihoa Island 1915.

2 August - Arrived Honolulu 0700. Disembarked Antonelis, Becker, Bertilsson-Friedman, Clark, Dick, Gibson, S. Gummeson, Liittschwager, Middleton, Pairis, Rehkemper, Wegmann, and Woodward. End of cruise.

MISSIONS AND RESULTS:

A. Disband field camps at Laysan and Lisianski Islands, PHR, and Kure Atoll, embarking all field personnel.

PSI field camps were successfully disbanded at Laysan and Lisianski Islands, PHR, and Kure Atoll.

B. Resupply and transport personnel to and from the USFWS field camp at Laysan Island.

Supplies and USFWS personnel were successfully transported to and from Laysan Island.

C. Transport field equipment and supplies for PSI and USFWS to the field station at Tern Island, FFS.

All equipment and supplies were transported to and from Tern Island, FFS.

D. Remove marine debris from Kure Atoll, Laysan Island, and Tern Island, FFS.

Derelict lobster traps were collected at Kure Atoll: 200 stashed on site and 209 transported to Midway Atoll. Marine debris was recovered at Laysan Island (2 pallet tubs) and FFS (3 pallet tubs). In addition, marine debris was recovered at PHR and Nihoa Island.

E. Retag seals at Kure Atoll.

One seal was retagged.

F. Conduct reef surveys for marine debris at Kure Atoll.

One 2-nmi tow transect was conducted on the east side of Kure Atoll. The submerged F/V PQII shipwreck was also resurveyed.

G. Conduct census of seals at Necker Island.

Seal surveys were conducted simultaneously on shore and by boat to compare the reliability of the boat surveys.

Conduct census of seals at Nihoa Island. Η.

> Seal surveys were conducted simultaneously on shore and by boat to compare the reliability of the boat surveys. Two weaned pups were also tagged.

I. Conduct CTD casts along the NWHI chain.

Nine CTD casts were successfully completed.

SCIENTIFIC

PERSONNEL:

Ray Boland, Chief, Scientist, Joint Institute for Marine and Atmospheric Research (JIMAR), University of Hawaii (UH) (July 15-24)

Amber Pairis, Chief Scientist, JIMAR, UH (July 26-27)

Brenda Becker, Chief Scientist, National Marine Fisheries Service (NMFS), Southwest Fisheries Science Center (SWFSC), Honolulu Laboratory (HL) (July 27-August 2)

Bud Antonelis, Wildlife Biologist, NMFS, SWFSC, HL

Petra Bertilsson-Friedmann, Cooperating Scientist, JIMAR, UH Matthew Berry, Cooperating Scientist, U.S. Fish and Wildlife Service (USFWS)

Tim Clark, Cooperating Scientist, USFWS

Brenden Courtot, Cooperating Scientist, USFWS

Dorothy Dick, Cooperating Scientist, JIMAR, UH

Lara Gibson, Cooperating Scientist, JIMAR, UH

David Gummeson, Cooperating Scientist, JIMAR, UH

Sheila Gummeson, Cooperating Scientist, JIMAR, UH

Irene Kinan, Cooperating Scientist, JIMAR, UH

Leslie Lamkin, Cooperating Scientist, National Oceanic

Atmospheric Administration (NOAA)

David Liittschwager, Cooperating Scientist, Environmental Defense Fund (EDF)

Bart McDermott, Cooperating Scientist, USFWS

Andrew McClung, Cooperating Scientist, University of Hawaii

Susan Middleton, Cooperating Scientist, EDF

Cindy Rehkemper, Cooperating Scientist, USFWS

Mike Stork, Cooperating Scientist, NOAA Teacher-At-Sea

Michelle Wainstein, Cooperating Scientist, JIMAR, UH

Alex Wegmann, Cooperating Scientist, USFWS

Samantha Whitcraft, Cooperating Scientist, Department of Land and Natural Resources (DLNR)

Kate Willis, Cooperating Scientist, JIMAR, UH

Rebecca Woodward, Cooperating Scientist, USFWS

Chad Yoshinaga, Cooperating Scientist, JIMAR

Submitted by:

Ray Boland

Chief Scientist (July 15-24)

Submitted by:

Amber Pairis

Chief Scientist (July 26-27)

Submitted by:

Brenda Becker

Chief Scientist (July 27-August 2)

Approved by:

R. Michael Laurs

Director, Honolulu Laboratory

Attachment